7/30

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8

```
        RAW SEQUENCE LISTING                    DATE: 08/21/2002
        PATENT APPLICATION:   US/09/974,870B    TIME: 10:12:59

        Input Set : N:\Crf3\08122002\I974870F.raw
        Output Set: N:\CRF3\08202002\I974870B.raw
```

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       1 <110> APPLICANT: Whitcombe, David
       2         Theaker, Jane
       3         Gibson, Neil
       4         Little, Stephen
       5 <120> TITLE OF INVENTION: Methods and Primers for Detecting Target Nucleic Acid
Sequences
       6 <130> FILE REFERENCE: 1991-211
C--> 7 <140> CURRENT APPLICATION NUMBER: US/09/974,870B
       8 <141> CURRENT FILING DATE: 2002-07-22
       9 <150> PRIOR APPLICATION NUMBER: US 09/200,232
      10 <151> PRIOR FILING DATE: 1998-11-25
      11 <150> PRIOR APPLICATION NUMBER: UK 9812768.1
      12 <151> PRIOR FILING DATE: 1998-06-13
      13 <160> NUMBER OF SEQ ID NOS: 9
      14 <170> SOFTWARE: PatentIn version 3.0
      16 <210> SEQ ID NO: 1
      17 <211> LENGTH: 30
      18 <212> TYPE: DNA
      19 <213> ORGANISM: Artificial Sequence
      20 <220> FEATURE:
      21 <221> NAME/KEY: misc_feature
      22 <222> LOCATION: ()..()
      23 <223> OTHER INFORMATION: B2098-BRCA Scorpion Primer
      24 <221> NAME/KEY: stem_loop
      25 <222> LOCATION: (1)..(29)
W--> 26 <221> misc_feature
      27 <222> LOCATION: (30)..(30)
      28 <223> OTHER INFORMATION: n = deoxyribouridine w/ fluorophore and replication blocker
W--> 29 <400> 1
W--> 30      cgcacgatgt agcacatcag aagcgtgcgn                          30
      32 <210> SEQ ID NO: 2
      33 <211> LENGTH: 29
      34 <212> TYPE: DNA
      35 <213> ORGANISM: Artificial Sequence
      36 <220> FEATURE:
      37 <221> NAME/KEY: misc_feature
      38 <222> LOCATION: ()..()
      39 <223> OTHER INFORMATION: R186-98, untailed equivalent of B2098 primer
      40 <400> SEQUENCE: 2
      41      ttggagattt tgtcacttcc actctcaaa                           29
      43 <210> SEQ ID NO: 3
      44 <211> LENGTH: 30
      45 <212> TYPE: DNA
      46 <213> ORGANISM: Artificial Sequence
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RAW SEQUENCE LISTING   DATE: 08/21/2002
PATENT APPLICATION: US/09/974,870B   TIME: 10:12:59

Input Set : N:\Crf3\08122002\I974870F.raw
Output Set: N:\CRF3\08202002\I974870B.raw

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       47 <220> FEATURE:
       48 <221> NAME/KEY: misc_feature
       49 <222> LOCATION: ()..()
       50 <223> OTHER INFORMATION: Z3702, probe segment of B2098 primer
       51 <221> NAME/KEY: stem_loop
       52 <222> LOCATION: (1)..(29)
W--> 53 <221> misc_feature
       54 <222> LOCATION: (1)..(1)
       55 <223> OTHER INFORMATION: fluoroscein dye
W--> 56 <221> misc_feature
       57 <222> LOCATION: (30)..(30)
       58 <223> OTHER INFORMATION: n = deoxyribouridine w/ fluorophore and replication blocker
W--> 59 <400> 3
W--> 60      cgcacgatgt agcacatcag aagcgtgcgn
                                                                           30
       62 <210> SEQ ID NO: 4
       63 <211> LENGTH: 18
       64 <212> TYPE: DNA
       65 <213> ORGANISM: Artificial Sequence
       66 <220> FEATURE:
       67 <221> NAME/KEY: misc_feature
       68 <222> LOCATION: ()..()
       69 <223> OTHER INFORMATION: B2731 Scorpion primer
       70 <221> NAME/KEY: misc_feature
       71 <222> LOCATION: (1)..()
       72 <223> OTHER INFORMATION: fluorescein dye
W--> 73 <221> misc_feature
       74 <222> LOCATION: (18)..(18)
       75 <223> OTHER INFORMATION: n = deoxyuridine w/ fluorophore and replication blocker
W--> 76 <400> 4
W--> 77      aggtagtgca gagagtgn
                                                                           18
       79 <210> SEQ ID NO: 5
       80 <211> LENGTH: 31
       81 <212> TYPE: DNA
       82 <213> ORGANISM: Artificial Sequence
       83 <220> FEATURE:
       84 <221> NAME/KEY: misc_feature
       85 <222> LOCATION: ()..()
       86 <223> OTHER INFORMATION: B2731 Scorpion primer
       87 <400> SEQUENCE: 5
       88      gagcctcaac atcctgctcc cctcctacta c
                                                                           31
       90 <210> SEQ ID NO: 6
       91 <211> LENGTH: 17
       92 <212> TYPE: DNA
       93 <213> ORGANISM: Artificial Sequence
       94 <220> FEATURE:
       95 <221> NAME/KEY: misc_feature
       96 <222> LOCATION: ()..()
       97 <223> OTHER INFORMATION: B4249 Scorpion primer
       98 <221> NAME/KEY: misc_feature
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   99 <222> LOCATION: (1)..(1)
  100 <223> OTHER INFORMATION: fluoroscein dye
W--> 101 <221> misc_feature
  102 <222> LOCATION: (17)..(17)
  103 <223> OTHER INFORMATION: attached replication blocking hexethylene glycol monomer
W--> 104 <400> 6
  105     aggtagtgca gagagtg                                                  17
  107 <210> SEQ ID NO: 7
  108 <211> LENGTH: 19
  109 <212> TYPE: DNA
  110 <213> ORGANISM: Artificial Sequence
  111 <220> FEATURE:
  112 <221> NAME/KEY: misc_feature
  113 <222> LOCATION: ()..()
  114 <223> OTHER INFORMATION: Quencher oligonucleotide
  115 <221> NAME/KEY: misc_feature
  116 <222> LOCATION: (19)..(19)
  117 <223> OTHER INFORMATION: n = deoxyribouridine with attached non-fluorogenic
fluorophore
W--> 118 <400> 7
W--> 119     cactctcctg cactacctn                                             19
  121 <210> SEQ ID NO: 8
  122 <211> LENGTH: 28
  123 <212> TYPE: DNA
  124 <213> ORGANISM: Artificial Sequence
  125 <220> FEATURE:
  126 <221> NAME/KEY: misc_feature
  127 <222> LOCATION: ()..()
  128 <223> OTHER INFORMATION: ARMS primer R284-97
  129 <400> SEQUENCE: 8
  130     ttcggggctc cacacggcga ctctcaac                                      28
  132 <210> SEQ ID NO: 9
  133 <211> LENGTH: 28
  134 <212> TYPE: DNA
  135 <213> ORGANISM: Artificial Sequence
  136 <220> FEATURE:
  137 <221> NAME/KEY: misc_feature
  138 <222> LOCATION: ()..()
  139 <223> OTHER INFORMATION: ARMS primer R283-97
  140 <400> SEQUENCE: 9
  141     ttcggggctc cacacggcga ctctcaag                                      28
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 08/21/2002
PATENT APPLICATION: US/09/974,870B   TIME: 10:13:00

Input Set : N:\Crf3\08122002\I974870F.raw
Output Set: N:\CRF3\08202002\I974870B.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 30
Seq#:3; N Pos. 30
Seq#:4; N Pos. 18
Seq#:7; N Pos. 19

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5,28
Seq#:3; Line(s) 58
Seq#:4; Line(s) 75
Seq#:6; Line(s) 103
Seq#:7; Line(s) 117

VERIFICATION SUMMARY   DATE: 08/21/2002
PATENT APPLICATION: US/09/974,870B   TIME: 10:13:00

                Input Set : N:\Crf3\08122002\I974870F.raw
                Output Set: N:\CRF3\08202002\I974870B.raw

```
L:7 M:270 C: Current Application Number differs, Wrong Format
L:26 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:29 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:30 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:53 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:56 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:59 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:60 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:73 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:76 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:77 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:101 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:104 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:118 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:7
L:119 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
```